UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/698,064	10/29/2003	Cynthia B. Robinson	02486.0072.NPUS01	9740
21971 7590 07/19/2007 WILSON SONSINI GOODRICH & ROSATI 650 PAGE MILL ROAD			EXAMINER	
			RAMACHANDRAN, UMAMAHESWARI	
PALO ALTO, (	PALO ALTO, CA 94304-1050		ART UNIT	PAPER NUMBER
			1617	
			MAIL DATE	DELIVERY MODE
			07/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
·	10/698,064 ROBINSON ET AL.	
Office Action Summary	Examiner	Art Unit
	Umamaheswari Ramachandran	1617
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet with the o	correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING I Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perio Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  1.136(a). In no event, however, may a reply be tired will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 04	<u>May 2007</u> .	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	nis action is non-final.	
3) Since this application is in condition for allow	·	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.
Disposition of Claims		
4)  Claim(s) 1, 2 and 4-14 is/are pending in the a 4a) Of the above claim(s) is/are withdr 5)  Claim(s) is/are allowed. 6)  Claim(s) 1, 2, 4-14 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers	•	
9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct at a content of the second	ccepted or b) objected to by the le drawing(s) be held in abeyance. Section is required if the drawing(s) is objection	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Bure: * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicati ority documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate

Art Unit: 1617

### **DETAILED ACTION**

Applicants' election of group I, claims 1-14 without traverse in the reply filed on 3/6/2007 is acknowledged. Applicants' have elected the following species with traverse (received in the office on 5/4/2007). 1) non-glucocorticoid steroids--- dehydroepiandrosterone-sulfate (DHEA-S) 2) methylxanthine derivative – theophylline, 3) Ubiquinones--formula (II) claim 6, n=I 0. Claims 3,15-18 are withdrawn from consideration. Claims 1, 2, 4-14 read on the elected species and are pending.

### Response to Remarks

Applicants' have argued that non-elected species would not require a burdensome search. In response, the instant application contains claims are directed to the following patentably distinct species: the species of non-glucocorticoid steroids; the species of methylxanthine; the species of ubiquinones; The species of non-glucocorticoid steroids, methylxanthine, and ubiquinones are independent or distinct because they are different chemical compounds with different structures, chemical and physical properties, bioavailabilities, pharmacokinetic profiles, and pharmacological efficacy. Because the species have different structures and properties, different searches are required for each species, which presents a substantial burden to the Office. The restriction requirement is made final.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226

**Art Unit: 1617** 

(Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 4-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10/923,171. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the pending application teach a pharmaceutical composition comprising the first active agent which is one of non-glucocorticoid steroid and a second active agent which is a methylxanthine derivative. The instant application teaches non-glucocorticoid steroid species encompassed by the genus non-glucocorticoid steroid compounds taught by the co-pending application. The claims (1, 2, 4-14) of the instant application fall within the scope of the claims 1-15 of the co-pending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1617

Claims 1, 2, 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nyce (2002/0032160) in view of Harwood et al. (US 5,026,709).

Nyce teach a composition and various formulations comprising therapeutic amounts of non-glucocorticoid steroid of formula I (para 0018) wherein R1 of formula I is hydrogen or SO2OM, wherein M comprises H, Na, sulfatide etc (para 0019). The reference further teaches that the composition includes the compounds of formula I such as DHEA, analogue thereof or salt thereof such as dihydroepidandrosterone sulfate, and/or a ubiquinone of formula II (elected species) or salt thereof, and a pharmaceutically or veterinarily acceptable carrier or diluent that are useful for treating bronchoconstriction, respiratory tract inflammation, allergies, asthma etc (see Abstract, para 0023, p 7, claim 1, p 8, claims 2-7, 11 and 14, p 9, claim 52). The reference further teaches that the compositions can be administered by generating an aerosol or spray comprised of respirable, inhalable, nasal or intrapulmonary delivered particles ranging from 10 to about 100 u in size (p 8, claims 35, 37, 39). The reference further teaches a kit comprising such formulation and a delivery device, comprising an inhaler wherein the formulation comprises an inhalable, respirable, intrapulmonary or nasal formulation and the inhaler comprises a nebulizer or insufflator that delivers individual premetered doses of the formulation (p 9, claims 42, 43-47).

The reference does not teach a second agent methylxanthine, theophylline in the composition.

Art Unit: 1617

Harwood et al. teach a sustained release composition comprising theophylline, an effective bronchodilator in a method of treatment of bronchial disorders such as asthma (col.3, lines 31-33, col.4, lines 8-12, col. 13, 14, claims 16-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to add a methylxanthine derivative in a composition comprising DHEA and ubiquinone. The motivation to do so is provided by Harwood et al. Harwood et al. teach a pharmaceutical composition comprising a methylxanthine such as theophylline to be useful in the treatment of bronchial disorders such as asthma. One of ordinary skill in the art would have been motivated to add a methylxanthine such as theophylline to a composition comprising DHEA and ubiquinone in the treatment of a respiratory condition such as asthma because prior art teaches both the compositions to be useful in the treatment of asthma and one can expect success in achieving a pharmaceutical composition comprising all the three components (a non-glucocorticoid steroid, DHEA sulfate, ubiquinone and a methylxanthine such as theophylline) and further can expect additive or synergistic effects in the combination therapy of asthma. The examiner respectfully points out the following from MPEP 2144.06: "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose....[T]he idea of combining them flows logically from their, having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069,-1072 (CCPA 1980).

**Art Unit: 1617** 

### **Conclusion**

Page 6

No Claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umamaheswari Ramachandran whose telephone number is 571-272-9926. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEEN! PADMANABHAN
AU. JAVISORY PATENT EXAMINER